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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,957	04/25/2006	Yoshiaki Taguchi	1009760-000029	2345

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BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER	
USELDING, JOHN E	

ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
09/19/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/576,957	TAGUCHI, YOSHIAKI	
	Examiner	Art Unit	
	John Uselding	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (5,091,135) in view of Kobayashi (2002/0151624).

Okada et al. teach a moldable composition for encapsulating electronic components comprising a liquid crystal polymer which can form an anisotropic melt phase (column 1, lines 53-55), polycarbonates which do not form an anisotropic melt phase (column 5, line 19), 0.1-30% silicone rubber having a particle diameter of 1-20μm (column 7, lines 12-17), and glass fibers (column 8, lines 15-16). While Okada et al. teach the use of fluorine based resins (column 5, line 20) the examiner relies upon the polytetrafluoroethylene of Kobayashi since it is part of their flame retardant package.

Regarding claims 3-4 and 12-14: applicant claims that the silicone rubber is formed by crosslinking organopolysiloxane and has an average particle diameter of 1-20μm. Okada et al. teach that their silicone rubber is formed by crosslinking

organopolysiloxane (column 5, lines 39-65) and has a particle diameter of 1-20μm (column 7, lines 12-17).

Regarding claim 7 and 16: applicant claims polycarbonate resin. Okada et al. teach the use of polycarbonate resin (column 5, line 19).

Regarding claim 9 and 18: applicant claims that the filler is glass fiber. Osaka et al. teach the use of glass fibers (column 8, lines 15-16).

Regarding claims 10, 11, 19, and 20: applicant claims injection molded article comprising the composition. Okada et al. teach that their composition will be injection molded to form a product (column 8, lines 40-41).

What Okada et al. fails to teach is a phosphor based flame retardant and a phosphorus oxo acid monoester or diester.

Kobayashi teaches a moldable polycarbonate resin composition with excellent heat and flame retardancy. To provide the heat and flame retardancy Kobayashi teaches the use of 3-20% (paragraph 0014) of a phosphorus flame retardant (0053), 0.1 to 2 parts by weight of polytetrafluoroethylene to improve the flame retardancy (paragraph 0071) and the phosphorus oxo acid diester dibutyl phosphate as a heat stabilizer (paragraph 0168). Kobayashi teaches the exact same formula as applicant's formula 1 of claim 2 (paragraph 0053). Kobayashi teaches the use of the phosphorus oxo acid diester dibutyl phosphate (paragraph 0168). While Kobayashi does not teach the exact parts by weight he does teach that it is present in trace amounts (paragraph 0167). Kobayashi teaches 0.1 to 2 parts by weight of polytetrafluoroethylene (paragraph 0071).

Since they are similar moldable resin compositions, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to incorporate the heat and flame retardant composition of Kobayashi into the resin composition of Okada et al. to provide a moldable resin composition with excellent heat and flame retardancy.

While the prior art does not teach all of the exact parts by weight given, it is obvious to modify the concentrations of the parts. Since the silicone rubber (C-2) is present .01-30% and the phosphor based flame retardant (C-1) is present 3-20%, part of ranges of (C-1) and (C-2) will provide a ratio of (C-1)/(C-2) from 1-2. For example, if (C-1) was 20% and (C-2) was 10% then the ratio (C-1)/(C-2) = 1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have varied the concentration of the flame retardant materials in order to produce a material having a desired level of flame retardance as this would be a result effective variable.

Response to Arguments

Applicant's arguments filed 7/3/2008 have been fully considered but they are not persuasive.

Applicant's argument that Okada et al. doesn't teach a concentration of 100 parts by weight of polycarbonate is not persuasive. Okada et al. teach that other thermoplastic resins can be incorporated so far as the object of the present invention is not disturbed. The applicant has failed to overcome the burden of prima facie obviousness because no reason has been provided as to why a polycarbonate

concentration of 100 parts by weight would disturb the invention of Okada et al. The prior art is not limited only to the teachings in the working examples just as the applicant is not limited to the teachings of their working examples.

Applicant's argument that Okada et al. and Kobayashi et al. are not combinable is not persuasive. Okada et al. teach that ordinary additives known in the art can be added to their composition (column 7, line 67 to column 8, line 1). It is very common in the art to add flame retardants to molding compositions. It is obvious impart heat resistance and flame retardancy to a molding composition by using a flame retardant that was used in another molding composition.

Applicant's argument that the silicone utilized by Okada et al. had a different intended use in the composition is not persuasive. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Applicant's argument of advantageous results is not persuasive. The advantages listed in the applicant's remarks are excellent mechanical strength, heat resistance and flame retardance. While these properties are advantageous they are not unexpected. One would expect that combining the composition of Okada et al., which has high mechanical strength (column 5, line 23) and high heat resistance (column 8, line 6), with the flame retardant of Kobayashi, which provides high heat resistance and flame retardance (0002), would provide a molded article with excellent mechanical

strength, heat resistance, and flame retardance. Also, a showing of unexpected results requires objective evidence of the unexpected nature of the result, not mere allegations of superior properties. See MPEP 716.02.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Uselding whose telephone number is (571)270-5463. The examiner can normally be reached on Monday-Thursday 6:00a.m. to 4:30p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo, Ph.D./
Supervisory Patent Examiner, Art Unit 1796
15-Sep-08

John Uselding
Examiner
Art Unit 1796